

Shared Maternity Care Workshop 1

Thursday 8 October 2026

The content in this session is valid at date of presentation

In collaboration with



Northern Health

Acknowledgement of Country

On behalf of the organisations here today North Western Melbourne PHN, Royal Woman's Hospital, Northern Hospital, Western Hospital and Mercy Health we acknowledge the Traditional Owners of the Kulin nation, on which our work in the community takes place. We pay respects to Elders past, present and emerging. and to any Aboriginal and Torres Strait Islander people in the session today.



Housekeeping – Zoom webinar



All attendees are muted



Please ask questions via the Q&A box only

- Q&A will be at the end of the presentation
- Questions will be asked anonymously to protect your privacy



This session is being recorded.

You will receive a link to this recording and copy of slides in post session correspondence.

Type your questions in the Q&A box.

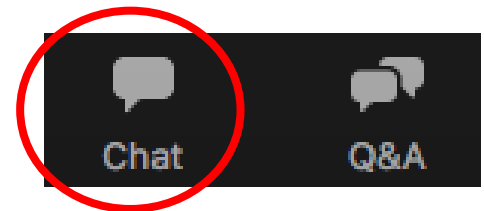
The screenshot shows the Zoom Q&A interface. At the top, there's a navigation bar with 'Chat' and 'Q&A' buttons. The 'Q&A' button is circled in red. Below this, the main area is titled 'Welcome to Q&A' and contains the text: 'Questions you ask will show up here. Only host and panelists will be able to see all questions.' At the bottom, there's a text input field with the placeholder 'Type your question here...'. Below the input field, there are three buttons: 'Send anonymously' (which is checked), 'Cancel', and 'Send'. An orange arrow points from the bottom left towards the input field.

Housekeeping – Zoom webinar

Is your session name the same as your registration?

To ensure we can issue your certificates and CPD please ensure you have joined the session using the same name as your event registration (or phone number, if you have dialled in).

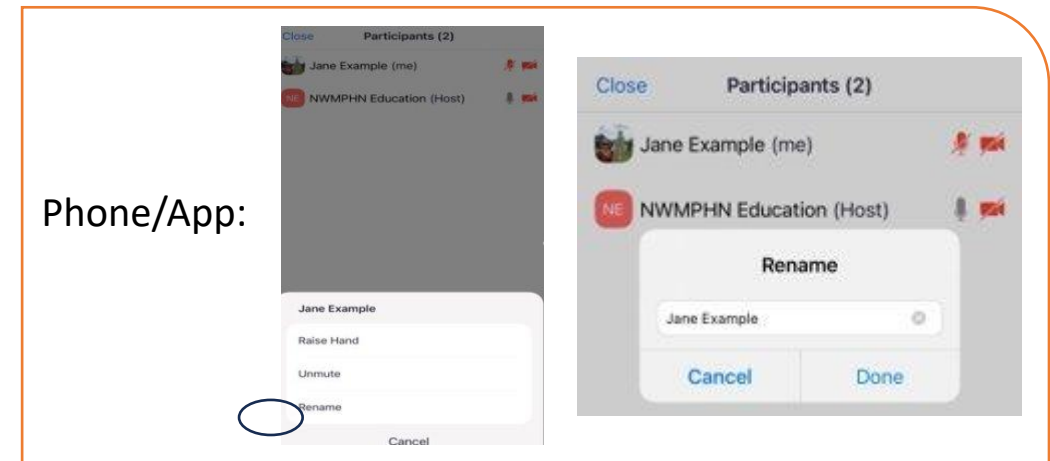
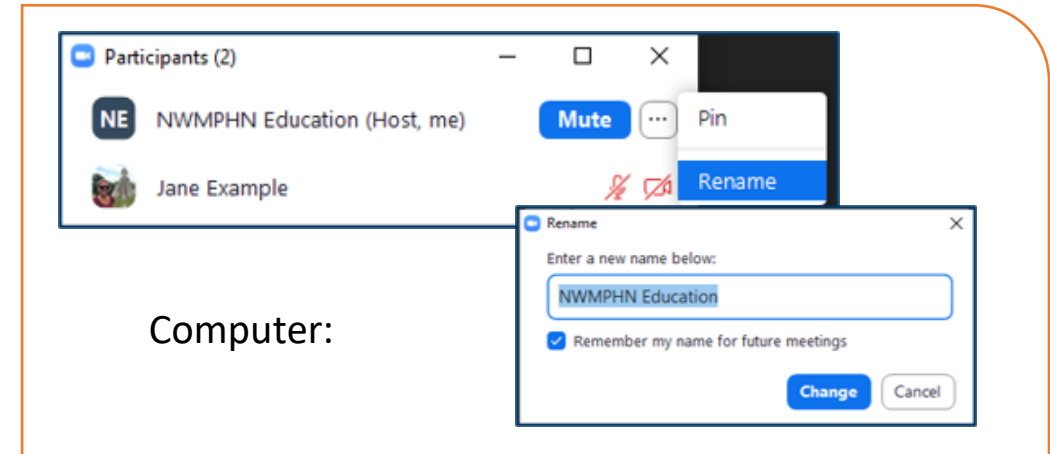
Not sure if your name matches, send a Chat message to 'NWMPHN Education' to identify yourself.



Housekeeping – Zoom webinar

How to rename yourself

1. Click on **Participants**
2. If using
 - App: click on your name
 - Computer: hover over your name and click the 3 dots
 - Mac: hover over your name and click More
3. Click on **Rename**
4. Enter the name you registered with and click **Done / Change / Rename**





Welcome to HealthPathways Melbourne



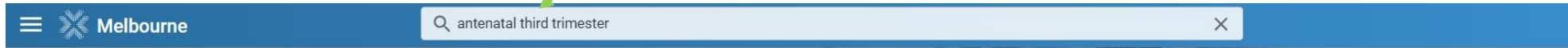
Pathways are written by GP clinical editors with support from local GPs, hospital-based specialists and other subject matter experts



- **clear and concise, evidence-based medical advice**
- **Reduce variation in care**
- **how to refer to the most appropriate hospital, community health service or allied health provider.**
- **what services are available to my patients**

HealthPathways – Shared Maternity Care

Search bar for quickly locating clinical pathways and conditions



Melbourne

Obstetrics

Preconception Assessment

Antenatal Care

Antenatal Care - First Consult

Antenatal - Second and Third Trimester Care

Anti-D Prophylaxis in Pregnancy

Decreased Fetal Movements (DFM)

Medications in Pregnancy and Breastfeeding

Prenatal Screening and Diagnosis of Fetal Anomalies

Use and Interpretation of Pregnancy Ultrasound

Diabetes in Pregnancy

Maternal Postnatal Check

Pregnancy and Postpartum Mental Health

Pregnancy Medical Conditions

Obstetric Referrals

Termination of Pregnancy (TOP)

Our Health System



Essential quick-access links for latest updates, Pathway updates, clinical resources and MBS items

Browse clinical suites via left-hand menu, organised into easy to navigate categories

Health Alert

From 1 July 2024, Closing the Gap (CTG) Pharmaceutical Benefits Scheme (PBS) Co-payment Program [has](#) been expanded to include to include all PBS medicines dispensed by community pharmacies, approved medical practitioners, and private hospitals.

Latest News

16 September

[Health.vic](#)

[Health alerts and advisories](#)

3 September

[Increasing pertussis \(whooping cough\) cases in Victoria](#)

Pathway Updates

Updated – 27 September
[Asthma and Pregnancy](#)

NEW – 27 September
[MyMedicare](#)

Updated – 26 September
[Medications in Pregnancy and Breastfeeding](#)

Updated – 26 September
[Use and Interpretation of Pregnancy Ultrasound](#)

Updated – 26 September
[Anti-D Prophylaxis in Pregnancy](#)

[ABOUT HEALTHPATHWAYS](#)

[BETTER HEALTH CHANNEL](#)

[RACGP RED BOOK](#)

[USEFUL WEBSITES & RESOURCES](#)

[MBS ONLINE](#)

[NPS MEDICINEWISE](#)

[PBS](#)

[SEND FEEDBACK](#)

Click 'Send Feedback' to add comments and questions about this pathway.



Melbourne

Community HealthPathways

Melbourne

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Summary of Referral Pages

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Search HealthPathways

Antenatal - Second and Third Trimester Care

Assessment

1. Ensure the initial assessment of patients has been completed according to the [Antenatal Care – First Consult](#) pathway. At each subsequent appointment:

- confirm the chosen model of maternity care.
- ensure patient has a [pregnancy booking](#) and appointments have been arranged and/or attended.
- check that all results from the previous antenatal checks have been provided to the patient and actioned.

2. Consider the needs of [priority populations](#).

3. Ask about:

- [symptoms of concern](#).
- [common conditions in pregnancy](#).
- [potentially sensitising events](#) for patients who are rhesus (Rh-D) negative. If a sensitising event has occurred, follow the [Anti-D Prophylaxis in Pregnancy](#) pathway.

4. Perform a [maternal and fetal well-being check](#).

5. Review the patient's lifestyle and well-being:

- Assess [smoking](#), [alcohol consumption](#), and [substance use](#).
- Assess [diet](#) and [exercise](#).

6. Review psychosocial risk factors and screen for [domestic and family violence](#).

7. Review mental health and well-being – consider administering the [Edinburgh Postnatal Depression Scale](#).

8. Arrange routine investigation if not already performed:

- [20 to 22 weeks](#)
- [24 to 28 weeks](#)
- [35 to 37 weeks](#)

Routine checks – 35 to 37 weeks

Typically, these will be organised by the obstetric care provider. Check that this has occurred.

- Consider FBE and ferritin – see [Anaemia in Pregnancy](#).
- [Anovaginal swab for group B streptococcus \(GBS\) – this is self-collected by the patient.](#)
- Syphilis testing – a minimum of 3 tests are now recommended during pregnancy for every pregnant person (at first antenatal visit, 26 to 28 weeks, and at 36 weeks or birth). See also [Changes to Syphilis Testing During Pregnancy](#).

9. Arrange additional investigations according to presentation:

- If suspected cholestasis in pregnancy – bile acids/LFTs. See also [Skin Conditions \(Rash and Itch\) in Pregnancy](#).
- If suspected UTI – MSU microscopy, culture, and sensitivity (MCS). See also [UTI and Asymptomatic Bacteriuria in Pregnancy](#).

Management

1. Refer for [acute obstetric review](#) if:

- the patient reports a change or decrease in fetal movements at > 24 weeks.
 - Send the patient for immediate review and CTG.
 - Do not advise them to eat or drink something to stimulate movement, or to rest and monitor movements for a period of time.
- unable to detect fetal heart beat after 24 weeks.
- vaginal bleeding and/or abdominal or pelvic pain.
- suspected [cholestasis of pregnancy](#) (itch with no rash and abnormal LFT/bile acids).
- open cervix.
- cervical length < 25 mm (transvaginal) on mid-trimester morphology scan.
- fetal growth restriction (FGR) detected < 31 weeks' gestation with the likelihood of requiring preterm birth.
- patient has hypertension (systolic BP ≥ 140 mmHg or diastolic BP ≥ 90 mmHg) or [symptoms of pre-eclampsia](#). See [Hypertension in Pregnancy and Postpartum](#).
- twin-twin transfusion syndrome or fetal death of monochorionic twin.

2. Refer for [non-acute obstetric review](#) and if possible, arrange urgent biometric [obstetric ultrasound](#) beforehand if:

- suspected intrauterine growth restriction (fundal height is > 2 cm smaller than expected or static over weeks).
- suspected macrosomia (fundal height is > 2 cm greater than expected dates).

3. Be aware of the [statewide referral criteria](#) for management at a level 6 maternity service. Regional or rural doctors should contact the closest level 5 maternity service first to discuss options.

4. Ensure all test results have been received and reviewed. [Follow up on abnormal results](#).

Learning objective



Search HealthPathways

Antenatal - Second and Third Trimester Care

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Referral

- Refer for [acute obstetric review](#) if:
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 - suspected macrosomia (fundal height is more than 2 cm greater than expected dates).
- If positive syphilis result, refer for [non-acute obstetric](#) or [infectious diseases review](#), or call Melbourne Sexual Health Centre doctors' information line 1800-009-903 for advice.
- Seek obstetric advice if:
 - abnormal antibodies detected.
 - any other concerns, including abnormal results.
- If disclosure of family violence, arrange [support](#).
- If Aboriginal and Torres Strait Islander patient, offer referral to [specific Indigenous services](#). For all referrals, ensure Indigenous status is clearly marked.

Relevant Pathways

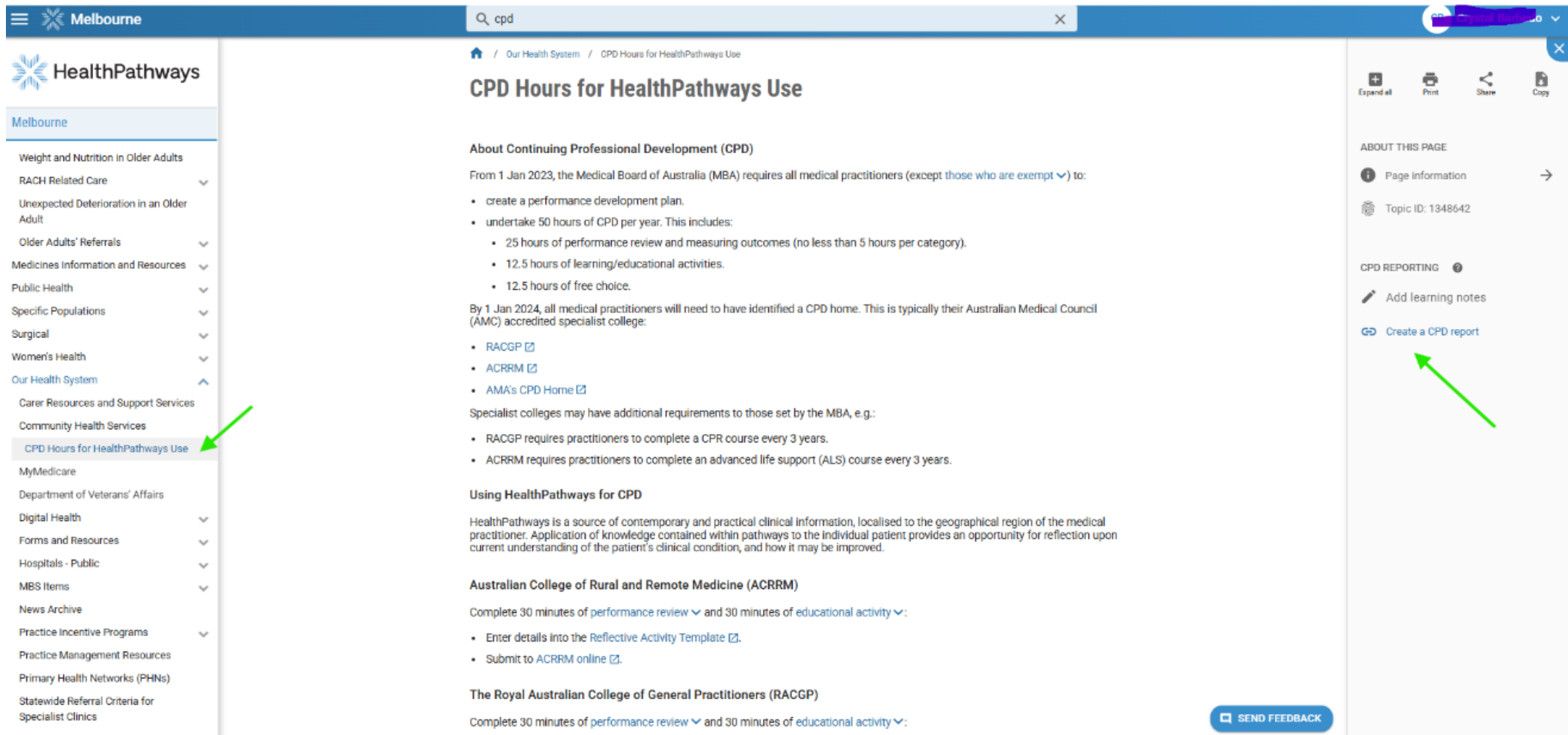
Antenatal Care

- [Antenatal Care - First Consult](#)
- [Antenatal - Second and Third Trimester Care](#)
- [Anti-D Prophylaxis in Pregnancy](#)
- [Decreased Fetal Movements](#)
- [Medications in Pregnancy and Breastfeeding](#)
- [Prenatal Screening and Diagnosis of Fetal Anomalies](#)
- [Use and Interpretation of Pregnancy Ultrasound](#)
- [Pregnancy and Postpartum Mental Health](#)
- [Ultrasound Pregnancy](#)

Obstetric Referrals

- [Pregnancy Booking](#)
- [Early Pregnancy Assessment Service \(EPAS\)](#)

HealthPathways – CPD Hours for HealthPathways Use



HealthPathways Melbourne

CPD Hours for HealthPathways Use

About Continuing Professional Development (CPD)

From 1 Jan 2023, the Medical Board of Australia (MBA) requires all medical practitioners (except those who are exempt) to:

- create a performance development plan.
- undertake 50 hours of CPD per year. This includes:
 - 25 hours of performance review and measuring outcomes (no less than 5 hours per category).
 - 12.5 hours of learning/educational activities.
 - 12.5 hours of free choice.

By 1 Jan 2024, all medical practitioners will need to have identified a CPD home. This is typically their Australian Medical Council (AMC) accredited specialist college:

- [RACGP](#)
- [ACRRM](#)
- [AMA's CPD Home](#)

Specialist colleges may have additional requirements to those set by the MBA, e.g.:

- RACGP requires practitioners to complete a CPR course every 3 years.
- ACRRM requires practitioners to complete an advanced life support (ALS) course every 3 years.

Using HealthPathways for CPD

HealthPathways is a source of contemporary and practical clinical information, localised to the geographical region of the medical practitioner. Application of knowledge contained within pathways to the individual patient provides an opportunity for reflection upon current understanding of the patient's clinical condition, and how it may be improved.

Australian College of Rural and Remote Medicine (ACRRM)

Complete 30 minutes of [performance review](#) and 30 minutes of [educational activity](#):

- Enter details into the [Reflective Activity Template](#).
- Submit to [ACRRM online](#).

The Royal Australian College of General Practitioners (RACGP)

Complete 30 minutes of [performance review](#) and 30 minutes of [educational activity](#):

ABOUT THIS PAGE

- [Page information](#)
- Topic ID: 1348642

CPD REPORTING

- [Add learning notes](#)
- [Create a CPD report](#)

SEND FEEDBACK

Access Now: Sign In or Scan to Register

Please click on the [Sign in or register](#) button to create your individual account or scan the QR code below.

If you have any questions, please email the team info@healthpathwaysmelbourne.org.au



The logo for Community HealthPathways Melbourne, featuring a stylized grid icon followed by the text "Community HealthPathways" and "Melbourne".

Welcome

This website is for health professionals only.

Important update: individual HealthPathways accounts are now required

To enhance the security and personalisation of your HealthPathways experience, shared logins are no longer available. All users will now need to access the site with an individual HealthPathways account.

Sign in or register to request access.

[Sign in or register](#)

Supported browsers:

- Chrome or Microsoft Edge on Android or Windows-enabled devices
- Safari on iOS devices

Get local health information, at the point of care

[What is HealthPathways?](#) ▾

[General enquiries](#) ▾

[Terms and conditions](#)

The logo for phn Eastern Melbourne, featuring the text "phn" in a bold, lowercase font, with "EASTERN MELBOURNE" and "An Australian Government Initiative" in smaller text below it.

The logo for phn North Western Melbourne, featuring the text "phn" in a bold, lowercase font, with "NORTH WESTERN MELBOURNE" and "An Australian Government Initiative" in smaller text below it.

Clinical referral pathways across Southern Alliance PHNs

PHN region	Clinical referral pathway platform	Link
Eastern Melbourne PHN + North Western Melbourne PHN	HealthPathways Melbourne	Open platform
Gippsland PHN	Gippsland Pathways	Open platform
Murray PHN	HealthPathways Murray	Open platform
South Eastern Melbourne PHN	The Clinical and Referral Guidance Hub (the Hub)	Open the Hub
Tasmania PHN (Primary Health Tasmania)	HealthPathways Tasmania	Open platform
Western Victoria PHN	HealthPathways Western Victoria	Open platform
Country SA PHN + Adelaide PHN	HealthPathways South Australia	Open platform

Not sure which PHN applies? [Use the Australian Government PHN locator map](#)

HealthPathways Melbourne is having a makeover

A refreshed look designed to make key information and commonly used actions easier to find.

COMING SOON

Community HealthPathways Melbourne

DRAFT

Resources

BF

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Lifestyle and Preventive Care

Medical

Mental Health

Older Adults' Health

Medicines Information and Resources

Public Health

Specific Populations

Surgical

Melbourne

Search for conditions, symptoms, or service providers

Search

Recent News

4 September

 **Health.vic**
[Health alerts and advisories](#)

3 September

 **Therapeutic Good Administration (TGA)**
Check [safety alerts](#), [safety updates](#), [recall actions](#), and [medicine shortages](#).

28 August

H5N1 strain of avian influenza (also called H5 bird flu) detected in wild birds in Victoria
Risk of spread to people in Victoria is low. Consider in patients with influenza-like illness who have had contact with sick or dead birds or animals. See:

- [advice and alert](#)
- [Urgent Notifiable Conditions](#).

Seasonal flu vaccination is recommended.

Resources

About HealthPathways

Better Health Channel

RACGP Red Book

Useful Websites & Resources

MBS Online

NPS MedicineWise

PBS

NHSD

Pathway Updates

Send feedback

Speakers

Dr Althea Askern, Generalist Obstetrician - Gynaecologist, Western Health

She continues to work at the busy Joan Kirner Women's and Children's at Western Health, providing gynaecological, pregnancy and birth care to women in Melbourne's west. Althea has held positions with RANZCOG and the University of Melbourne providing teaching and mentorship to junior doctors and medical students. Althea is passionate about providing care that is kind, supportive, and evidence-based, so that individuals and families can make informed decisions about their care.

Dr Iniyaval Thevathasan, Obstetrician and Maternal Fetal Medicine Subspecialist, The Royal Women's Hospital

With a private practice at Melbourne Maternal Fetal Medicine in Fitzroy and a public appointment at The Royal Women's Hospital. She provides comprehensive pregnancy care and has particular interests in the prevention of preterm birth, the management of previous adverse pregnancy outcomes, multiple pregnancies, and the care of women with inflammatory bowel disease during pregnancy.

Birth Choices

ALTHEA ASKERN

8.10.2026

A solid orange horizontal bar spanning the width of the slide at the bottom.

For Discussion

Birth choices

- Planned Elective Caesarean Section
- Planned Vaginal Birth
- Planned Elective Induction of Labour

Shared Decision Making and Counselling

Group B Streptococcus – GBS

About Me

- Conflicts of interest: None
- Disclaimer: all opinions expressed are my own

Birth Choices



Birth Choices

What kind of birth do I want?

Where / which provider?

Birth Choices

What kind of birth do I want?

- *Planned vaginal birth / planned Caesarean Section*
- *Planned interventions: e.g. epidural, induction of labour*
- *Expectant management: spontaneous labour, minimal intervention etc*

Where / which provider?

- *Public / Private*
- *Midwifery-led / Obstetrician-led*

Models of Care and Place of Birth

- Public hospital-based care
 - Midwifery group practice +/- homebirth
 - General clinics or specialist clinics
 - Shared care with GP
- Private midwifery
- Private obstetrics

Other:

- Doula / birth attendant
- Freebirth – not homebirth

Birth Choices

Options for birth provider and modes of birth are affected by personal preference, medical conditions, obstetric conditions and model of care selected – affected by cost and location

Focus this evening on the first birth

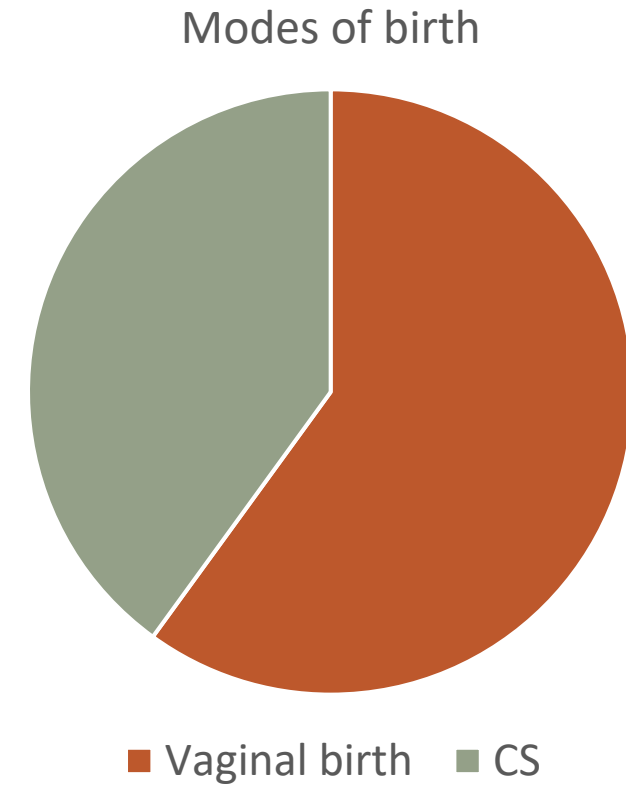
>> The first birth affects future birth outcomes

Focus on elective CS, elective induction, rather than medical indications

A few things we can't cover

The Stats... Australia in 2023

- About 60% have a vaginal birth
- About 40% have a CS

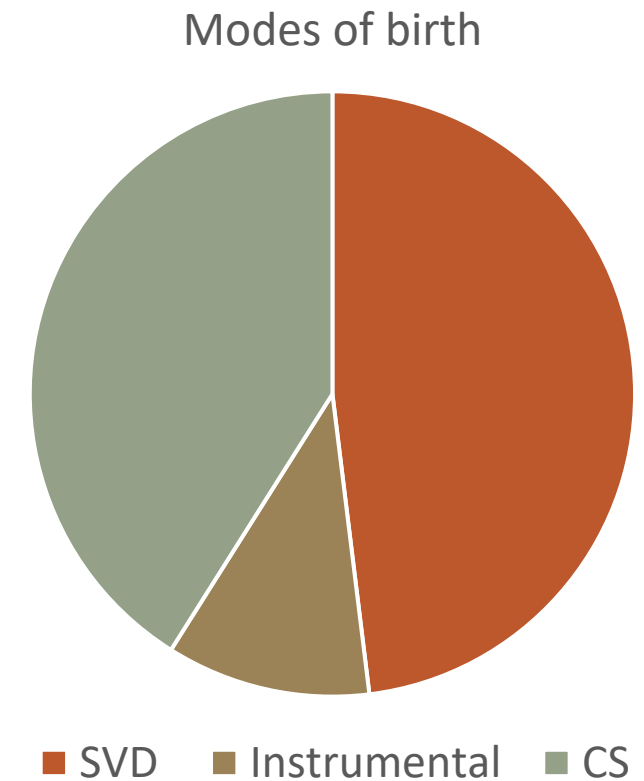


AIHW Mothers and Babies, Published June 2026, Data from 2023

The Stats... Australia in 2023

- 48% SVD
- 10.9% instrumental
 - 4.3% forceps
 - Primip 8.2%
 - Multi 0.5%
 - 6.6% vacuum
 - Primip 11%
 - Multi 1.1%
- 41% Caesarean Section [32% in 2010]
 - Primips 43%
 - Multi with no previous CS 14%
 - Multi with previous CS 76%

NPDC does not differentiate between elective/planned CS and emergency/unplanned CS



AIHW Mothers and Babies, Published June 2026, Data from 2023

Figure 4. Indicator 1a: Rate of induction of labour in standard primiparae, 2022

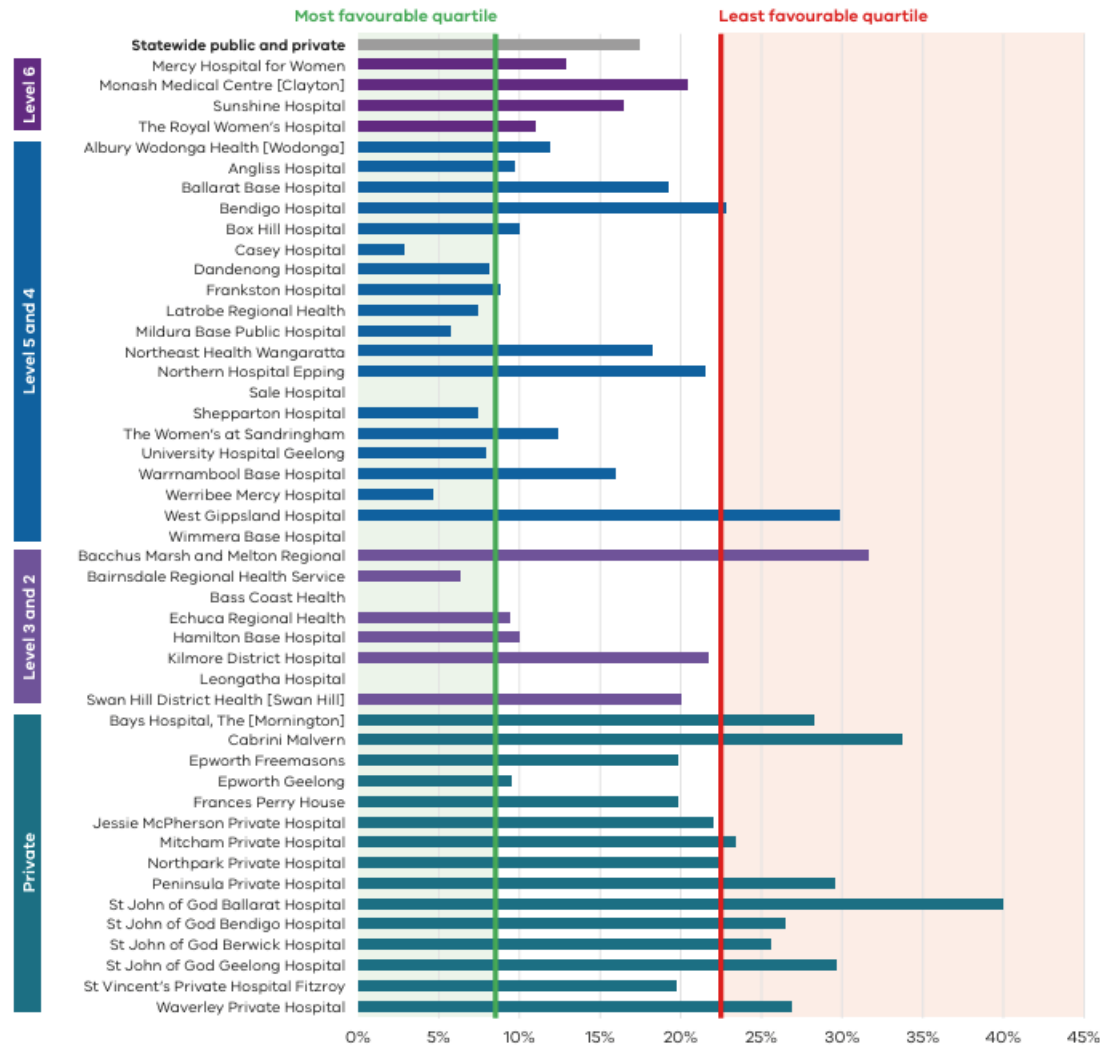


Figure 7. Indicator 1bi: Rate of caesarean section in Robson group 1, 2022



The Stats... there is so much and so little information available

How do we individualise information?

A healthy primip

A healthy primip who is 150cm tall vs 180cm tall

A healthy primip who conceived with IVF

A healthy primip who is 39 years old

A healthy primip with a history of health anxiety

A healthy primip with a history of urinary incontinence

Other outcomes

- Epidural
- Tearing and episiotomy
- Severe perineal trauma
- SCN/NICU admissions

Birth Choices

- Planned Elective Caesarean Section
- Planned Vaginal Birth
- Planned Elective Induction of Labour

Planned Caesarean Section

Benefits

- Planned timing
- Predictable outcome
- Surgical risks are lower at an elective Caesarean compared to an emergency Caesarean
- Reduced risk of pelvic floor dysfunction

Risks

- Surgical risks
 - Bleeding, infection, VTE
- Recovery differences
- Impacts of scar on future pregnancies
 - Uterine rupture, placental adhesive disorders
 - Risks of recurrent CS
- Higher chance of neonatal breathing difficulties prior to 39 weeks
- Longer term risks of childhood obesity, asthma and childhood infections

RANZCOG Guideline on Caesarean Birth on Maternal Request

Planned Vaginal Birth

Benefits

- Physiological process
- Faster recovery and shorter hospital stay
- Reduced risk of complications in future pregnancies compared to CS
- Reduced chance of NICU / SCN admission for the baby

Risks

- Unpredictable birth outcomes and risks of intervention
 - Assisted vaginal birth
 - Emergency CS
- Risk of perineal tearing, anal sphincter tearing
- Future prolapse / incontinence risks
- Risks such as shoulder dystocia or fetal hypoxia

Emerging: Elective Induction of Labour

Baseline: recommend birth for all women by 42 weeks to reduce the risk of stillbirth

The ARRIVE Trial in 2018 randomised women to IOL at 39 weeks or expectant management for **low risk primips**

Benefits of IOL at 39 weeks

- Reduced CS risk [22% to 18%]
- Prevention of gestational hypertension
- No difference in composite adverse perinatal outcomes
- No difference in assisted vaginal birth

In Australia in 2004, 26% of women had IOL. In 2020, 46% did. [AIWH]

Elective Induction of Labour

Benefits

Risks

It depends where you look....

Elective Induction of Labour

Benefits – Cochrane, 2020

- Fewer perinatal deaths [RR 0.31]
 - NNT 544
 - 0.4 vs 3 deaths / 1000
- Fewer Caesarean Sections [RR 0.9]
- Little/no difference in Assisted Vaginal Birth
- Little/no difference in SPT or PPH
- Fewer NICU admissions [RR 0.88]

Benefits – Meta-analysis Hong et al, 2023

- Fewer OASI, reduced by 37%
- Fewer instrumental births OR 0.87
- Fewer macrosomic babies OR 0.66
- Fewer NICU admissions OR 0.65
- No difference in CS or PPH
- In multiparous women
 - Reduction in CS [OR 0.61]
 - No difference in Assisted Vaginal Birth
- In nulliparous women, higher risk of shoulder dystocia OR 1.22

Elective Induction of Labour

Risks – Population based linked data study Dahlen et al, 2021

- SVD
 - 42% IOL vs 62% Spont labour
- Assisted Vaginal Birth
 - 28% IOL vs 24% Spont Labour
- Caesarean Section
 - 29% IOL vs 14% Spont Labour
- Epidural
 - 71% IOL vs 41% Spont labour
- Episiotomy
 - 41% IOL vs 30% Spont Labour

Risks – Victorial Perinatal Services Performance Indicators from 2022

- IOL in low risk primips
 - 12% in public hospitals
 - 24% in private hospitals
- Caesarean Section in primips in spontaneous labour
 - 18% in public hospitals
 - 26% in private hospitals
- Caesarean Section in primips after IOL
 - 33% in public hospitals
 - 30% in private hospitals

Elective Induction of Labour

Benefits

- Controlled timing
- Reduced stillbirth
- Probably no increase in Caesarean Section, if not a reduction
- Unclear effects on instrumental birth

Risks

- Higher chance epidural
- Longer hospital stay / takes longer
- Altered experience of labour



Birth Choices

- Physiological process
- Often undertaken in a medicalized setting
- With changing consumer demographics
- And changing consumer expectations
- Highly emotive
- High stakes

Common Questions and Comments

- What's my chance of a CS?
- I don't want forceps under any circumstances
- I want things to be natural
- I just want a healthy baby

What Factors Influence Decision Making

- Individual Consumer
 - Practitioner
 - Organisation
 - Government
 - Cultural
-
- Birth trauma context
 - Improved consumer autonomy
 - Mistrust of standard healthcare recommendations
 - Greater availability of information to consumers
 - Alternative sources of information

Shared Decision Making

- Collaborative: clinician, consumer and support persons
- Combining evidence-based information
 - Accurately understood
- With patient preference



There are 4 steps 1 2 3 4

1 Clarify your decision

What decision do you face?

What are your reasons for making this decision?

When do you need to make a choice?

How far along are you with making a choice? ☐ Not thought about it ☐ Close to choosing
☐ Thinking about it ☐ Made a choice

2 Explore your options

Options you can choose from (includes doing nothing or making no change)	Reasons to Choose this Option Benefits / Advantages / Pros	How much it matters to you: 0★ not at all 5★ a great deal	Reasons to Avoid this Option Risks / Disadvantages / Cons	How much it matters to you: 0★ not at all 5★ a great deal
Option 1				
Option 2				
Option 3				

Which option do you prefer? ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Unsure

3 Explore views of others involved in the decision

Who else is involved?			
Which option does this person prefer?			
Are you feeling pressured by this person?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
How can this person support you?			

Tools

3 questions to ask your healthcare professional to better understand your treatment and care options. Complete this form at your appointment.

Ask...

1. What are my options? (including wait watch)
2. What are the possible benefits and harms of those options?
3. How likely are each of those benefits and harms to happen to me?

Share...

What did I tell the health professional?
(E.g. lifestyle; preferences; personal & family medical history)

Know...

What do I do now?
(At the end of the consultation make a note of what you have decided to do)

Tools

BRAND mnemonic

B

BENEFITS

- What are the benefits of the recommended test or procedure?

R

RISKS

- What are the risks of the recommended test or procedure?

A

ALTERNATIVES

- What other options are there to the recommended test or procedure, including doing nothing?

N

NOW OR NOTHING

- Does this decision need to be made now? What if I decide not to have the test or procedure?

D

DECISION

- The final decision is yours.

What is BRAIN?

BRAIN is a structured approach to decision-making that ensures you have all the information you need to make choices that are right for you and your baby.

B – Benefits: What are the advantages or positive outcomes of this option?

R – Risks: What are the potential disadvantages, side effects, or complications?

A – Alternatives: What other options are available to me?

I – Intuition: What is my gut instinct telling me about this decision?

N – Nothing: What happens if I choose to do nothing or delay this decision?

Presenting Statistics

- Avoid terms like “low risk”, “rare”, “uncommon”
- Aim to compare probabilities with a consistent denominator rather than a consistent numerator
- Take great care with absolute risk and relative risk
- Consider
 - Absolute risk reduction
 - Relative risk reduction
 - Number needed to treat – not well understood by most patients

Presenting Statistics

Complication	Planned caesarean birth	Planned vaginal birth	Statistical measures	Interpretation in plain language, including the number needed to treat or harm (NNT/NNH)
Surgery for prolapse (25 year follow up)	30/10,000 (1 in 333)	190/10,000 (1 in 53)	RR 0.2 (95% CI 0.1-0.2) National Board of Health and Welfare (Sweden) report 2018	Planned caesarean birth may decrease surgery for prolapse up to 25 years later – there is one additional surgery for prolapse avoided for 70 caesarean births after 25 years. GRADE of evidence: Low

Helpful Phrases

- What's important to you for your birth?
- What do you know about your options already?
- Are there questions that you have already?
- Write down your questions and bring them with you next time.

Challenges to Shared Decision Making

In my experience in the public health system

- Lack of time
- Lack of continuity of care
- Challenges to implementing preferred patient plans [resourcing]
- Mismatched expectations

In obstetrics:

- Lack of evidence
- Difficulties individualising risk
- Understanding where consumers seek their information

For practitioners: fear of making a recommendation

Phew



Group B Strep



Group B Strep

- *Strep agalactiae*
- About 20% of women carry GBS
- *RANZCOG*: 4/1000 [1/250] of these babies develop Early Onset GBS Sepsis [mostly pneumonia/respiratory features]
 - Case fatality is 14% overall
 - Case fatality in preterm babies is 20%
 - Risk of long term physical or mental disabilities is 7.4% [RCOG]

Group B Strep

- Intrapartum antibiotic prophylaxis reduces the risk of EOGBS by 80%
 - Risk of EOGBS in GBS+ woman: 1/200 if no IAP, 1/4000 if given IAP [CDC, 2018]
 - One Australian study demonstrated NNT 224
- No effect on incidence of late onset GBS
- Harms of penicillin
 - Mild reactions, Anaphylaxis 1/2000
 - Alterations to maternal and neonatal microbiome
- Recommendations for management of this risk differ between organisations

Group B Strep

- Screening at 35-36 weeks
 - Positive > Recommend IAP
 - If there is PROM, do not wait for spontaneous labour, recommend immediate induction of labour
 - Negative > Recommend IAP only if risk factors develop
 - Declined > Treat as negative
- Do not offer screening, treat as GBS positive if:
 - GBS present on a swab during pregnancy
 - GBS present in the urine during pregnancy [even if treated]
 - Previous baby affected by GBS, early or late onset
 - Preterm labour

GBS – approaches to risk management

Universal Screening	Risk Factor Based Treatment
Offer a low vaginal / anorectal swab at 35-37 weeks If GBS positive, recommend IAP If GBS negative, recommend IAP if there are risk factors	Recommend intrapartum penicillin if: - Preterm labour - Ruptured membranes >18hrs - Intrapartum maternal pyrexia - Previous baby with GBS [early or late] - Incidental finding of GBS+ during pregnancy on swab or urine

GBS – Why wouldn't you screen?

- Overtreatment risk / unnecessary exposure to antibiotics for majority of people
 - Antibiotic resistance
- Cost effectiveness
- Transient nature of the bacteria [false positives and false negatives]
- Many severely affected babies are preterm – born prior to the 35-37w swab
- Risks to neonatal gut health
- Longer term impacts of BMI and autoimmune disease

- Personal preference e.g. cannula fear, access to certain types of care e.g. homebirth

- Don't test if you don't want the answer
 - Pitfall: Accidental findings

What to do?

- Follow local and well-established guidelines in making your recommendations

What to do?

- Follow local guidelines in making your recommendations
 - WHO 2024: Offer universal screening, with a risk based alternative where universal is not feasible
 - RANZCOG: Either approach is acceptable
 - Safer Care Victoria: Either approach is acceptable
 - RCOG: Risk-factor based approach
 - Queensland Health: Risk-factor based approach
 - ACOG: Universal screening approach
 - KEMH: Universal screening approach
 - RWH: Universal screening approach
 - WH: Universal screening approach
- Discuss directly with the consumer, explain local guidelines, and used shared decision-making principles

My GBS Spiel

Key Messages

- In maternity care:
 - Discuss all available options
 - Being open and honest about lack of evidence or conflicting evidence
 - Using the principles of shared decision making
 - GBS screening as a good example of choices around birth – pros and cons

Resources / References

- Australian Institute of Health and Welfare, Mothers and Babies, National Core Maternity Indicators
- RANZCOG Guideline: Caesarean Birth on Maternal Request, 2023
- Safer Care Victoria, Maternity eHandbook
- Australian Commission of Safety and Quality in Health Care, Shared Decision Making. [Shared decision-making | Australian Commission on Safety and Quality in Health Care](#)
- ACSQHC Ask Share Know. [Ask Share Know summary sheet | Australian Commission on Safety and Quality in Health Care](#)
- Ottawa Personal Decision Guide © 2025 Stacey, Lewis, O'Connor at the Ottawa Hospital Research Institute & University of Ottawa, Canada (with J Finderup in Denmark, S Kienlin in Norway, J Persson Kylan in Sweden).
- RANZCOG Guidelines [Maternal Group B Streptococcus in pregnancy screening and management](#)
- Qld Health Guidelines [Guideline: Early onset Group B Streptococcal Disease](#)

References

- Grobman WA, Rice MM, Reddy UM, *et al.* Labor Induction versus Expectant Management in Low-Risk Nulliparous Women. *N Engl J Med* 2018;**379**:513–23. [doi:10.1056/NEJMoa1800566](https://doi.org/10.1056/NEJMoa1800566)
- Hong J, Atkinson J, Roddy Mitchell A, et al. Comparison of Maternal Labor-Related Complications and Neonatal Outcomes Following Elective Induction of Labor at 39 Weeks of Gestation vs Expectant Management: A Systematic Review and Meta-analysis. *JAMA Netw Open.* 2023;6(5):e2313162. doi:10.1001/jamanetworkopen.2023.13162
- Dahlen HG, Thornton C, Downe S, *et al.* Intrapartum interventions and outcomes for women and children following induction of labour at term in uncomplicated pregnancies: a 16-year population-based linked data study. *BMJ Open* 2021;**11**:e047040. doi: 10.1136/bmjopen-2020-047040
- Safer Care Victoria. Victorian perinatal services performance indicators 2022. May 2025. [Victorian perinatal services performance indicators 2022](#)
- Middleton P, Shepherd E, Morris J, Crowther CA, Gomersall JC. Induction of labour at or beyond 37 weeks' gestation. *Cochrane Database Syst Rev.* 2020 Jul 15;7(7):CD004945. doi: 10.1002/14651858.CD004945.pub5. PMID: 32666584; PMCID: PMC7389871.



Incidental Findings on Pregnancy Ultrasound

WHAT TO LOOK FOR, WHEN TO BE CONCERNED,
WHEN NOT TO

DR INIYAVAL THEVATHASAN (MFM SUBSPECIALIST)

Five things I want you to learn



RECOGNISE DIFFERENCES
BETWEEN INCIDENTAL AND
SIGNIFICANT ULTRASOUND
FINDINGS



BE AN EXPERT AT DEALING
WITH COMMONLY
REPORTED PATHOLOGY



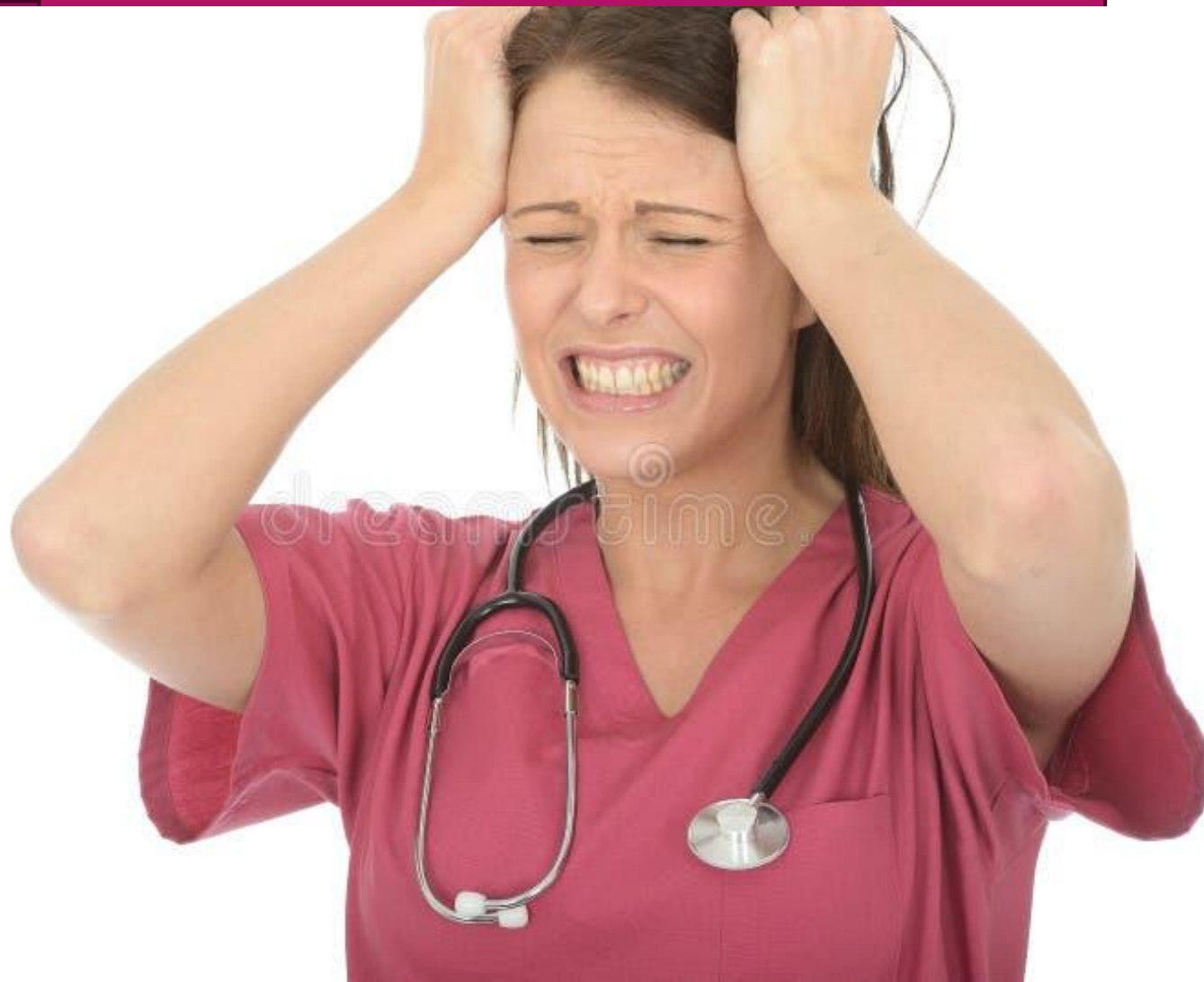
REALISE THAT NOT ALL
ULTRASOUND IS CREATED
EQUAL



NAVIGATE THE "THREE R'S"
– REASSURE, REVIEW,
REFER



KNOW YOUR REFERRAL
PATHWAYS



Three questions for any finding

1. Is it isolated?

One finding, in an otherwise normal scan

2. Will it resolve with gestation?

Possibly a temporary problem

3. Does it change management?

If yes – does it need further investigation or referral

1. Is it isolated?

Conclusion

There is a single live intrauterine fetus at 21+3 weeks gestation. There is an echogenic intracardiac focus but the remainder of the anatomy appears normal. The placenta is posterior and low lying. The cervix measures 19 mm with funnelling and cervical sludge seen.

3. Does it change management?

Follow up:

GP appointment planned today

2. Will it resolve with gestation?

Not all obstetric ultrasound is created equal

General radiology

- ▶ Sonographer based, radiologist reporting
- ▶ Broad education in all body systems
- ▶ Wide range of terminology used
- ▶ Patient not told results at the time of scan

COGU/MFM

- ▶ Obstetricians/gynaecologists with 3 additional years of training
- ▶ Dedicated to O&G ultrasound
- ▶ Standardised terminology/criteria
- ▶ Patient (and referer) told of results at the time of scan

The Three R's

Reassure

- Isolated finding that does not change course of pregnancy
- Isolated echogenic intracardiac focus, mildly echogenic bowel
- Try not to overscan

Review

- Findings that require follow up
- Low lying placenta, mildly dilated renal pelvis
- Plan re-scan for certain date with follow up depending on results

Refer

- Findings that require urgent follow up
- Major abnormality, short cervix, ectopic pregnancy
- Refer to MFM/COGU



Early pregnancy

Ectopic Pregnancy

▶ The problem

- ▶ Empty uterus with adnexal mass
- ▶ Rupture can be life-threatening

▶ The solution

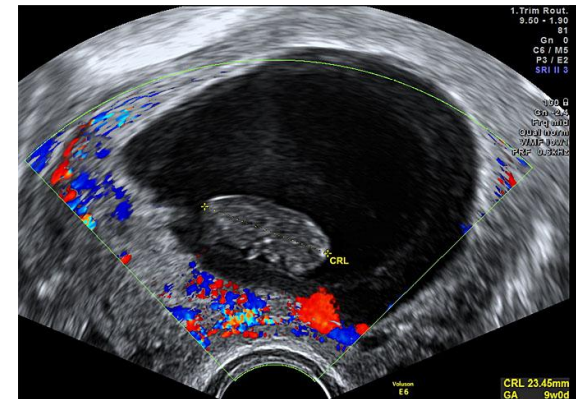
- ▶ If haemodynamically unstable, or rupture on ultrasound → ED
- ▶ If stable, no free fluid → EPAS within 24 hours
- ▶ Don't forget anti D

REFER



Diagnosis of miscarriage

- ▶ ASUM criteria (single scan)
 - ▶ $MSD \geq 25$ mm with no embryo
 - ▶ $CRL \geq 7$ mm with no heart beat
- ▶ ASUM criteria (multiple scans)
 - ▶ Initial scan $CRL < 7$ mm with no HR and repeat >7 days with no HR
 - ▶ Initial scan $MSD > 12$ mm and repeat >7 days with no YS/embryo
 - ▶ Initial scan $MSD < 12$ mm and repeat in 14 days with no YS/embryo/double MSD size
 - ▶ YS on initial scan and no embryo in 11 days
 - ▶ Presence of HR in one scan and absent in next



If in doubt – repeat the scan!

Management of miscarriage

Reassure

Single scan diagnostic
Conservative/medical
management

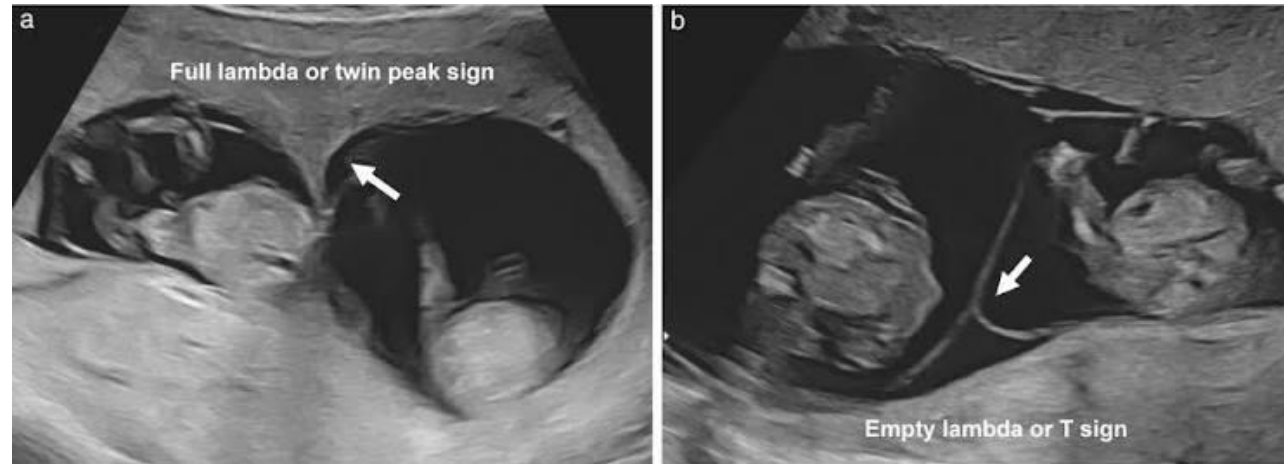
Review

Uncertain diagnosis on
single scan
Repeat scan or
referral to EPAS

Refer

Referral to EPAS
Surgical management

Multiple Pregnancy



- ▶ Ultrasound paramount in determining later care
- ▶ Chorionicity determines monitoring and delivery timing
- ▶ 10-13 weeks best time for scan
- ▶ Choose provider wisely!



First Trimester

Nuchal Translucency

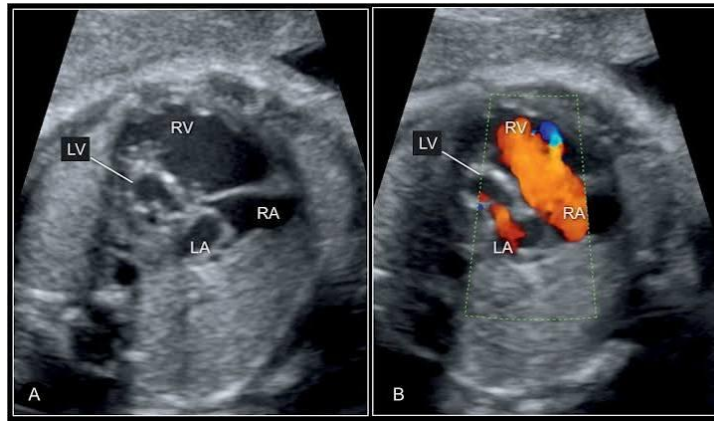
- ▶ NT $\geq$ 3.5 mm increases the risks of genetic/structural abnormalities
- ▶ Cell free DNA screening alone does not exclude all anomalies



- ▶ Genetics service for diagnostic testing
- ▶ Ongoing follow up in fetal medicine

First Trimester Anomalies

REFER



- ▶ Genetics/fetal medicine review
- ▶ Consideration of diagnostic testing
- ▶ Options for pregnancy

QDOS Ultrasound

ck



Second Trimester

Low Lying Placenta

- ▶ Placenta <20 mm from the internal os
- ▶ Most resolve

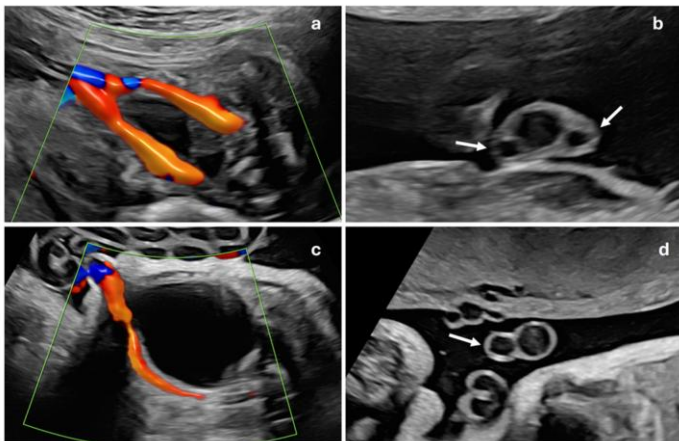


REVIEW

- ▶ Repeat ultrasound at 32 weeks
- ▶ Watch for signs of PAS
- ▶ Educate re: bleeding precautions

Single Umbilical Artery

- ▶ Approximately 1/100
- ▶ If isolated, not associated with abnormalities

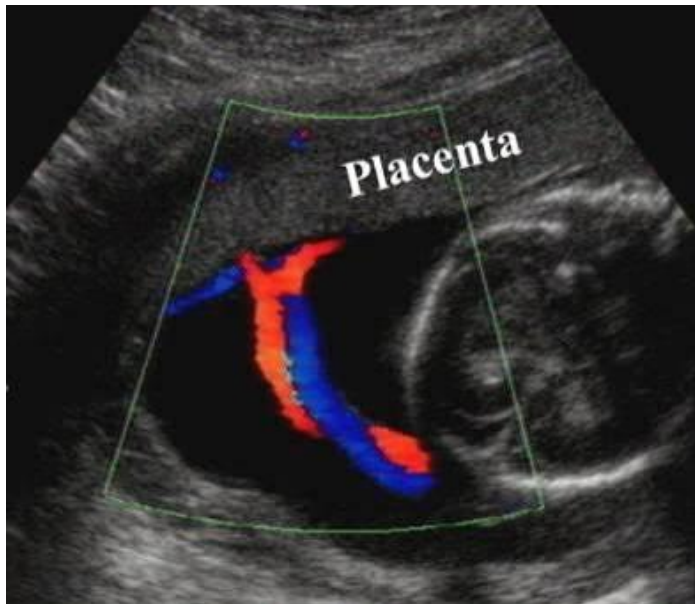


REVIEW

- ▶ Tertiary ultrasound of heart/kidneys
- ▶ Growth surveillance

Marginal Cord Insertion

- ▶ Cord inserts next to placental edge
- ▶ 6-8%, higher in multiple pregnancy



REVIEW

- ▶ Growth surveillance 28/32/36
- ▶ Increased risk retained placenta

Velementous cord insertion

- ▶ Cord inserts into membranes
- ▶ Risk of vasa praevia/vessel rupture



REFER

- ▶ Tertiary level TV ultrasound
- ▶ Surveillance/admission/delivery

Renal pelvis dilatation

- ▶ $> 4 \text{ mm}$ $< 28 \text{ weeks}$, $> 7 \text{ mm}$ $> 32 \text{ weeks}$
- ▶ 1/100 pregnancies



REVIEW

- ▶ Review at 32 weeks, most resolve
- ▶ If persistent + mild - surveillance, postnatal scan
- ▶ If persistent + severe – FMU referral, paediatric review

Soft Markers

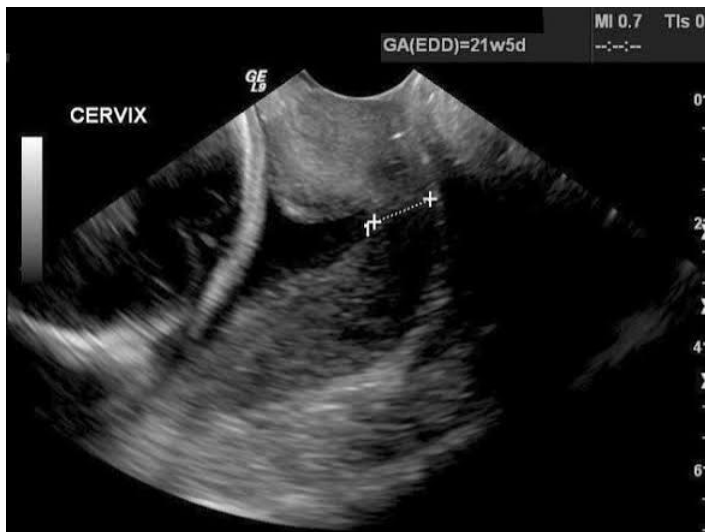
REASSURE



- ▶ Likely normal variants in the age of cell free DNA
- ▶ Ensure scan done by reputable provider
- ▶ If in doubt → refer

Short cervix

- ▶ < 25 mm between 15-26 weeks
- ▶ 2% in low risk, 5% in high risk populations
- ▶ Up to 50% risk of PTB without intervention



**REVIEW
/ REFER**

- ▶ Commence progesterone 200 mg nocte
- ▶ Referral to preterm labour surveillance
- ▶ Referral to ED if cervix <15 mm – for cerclage



Third Trimester

Oligohydramnios

- ▶ AFI < 7 (gestational age variation)
- ▶ PPROM/renal abnormalities/placental insufficiency



REFER

- ▶ Exclude PPROM
- ▶ Tertiary level scan to exclude anomalies
- ▶ Growth surveillance and delivery decisions

Polyhydramnios

- ▶ AFI > 25 (gestational age variation)
- ▶ GDM/LGA/TOF/CNS anomalies

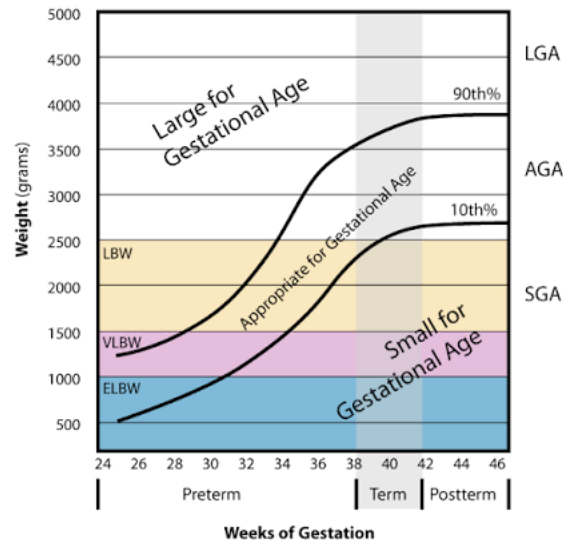


REFER

- ▶ Exclude GDM
- ▶ Tertiary level scan to exclude anomalies
- ▶ Growth surveillance and delivery decisions

Small for gestational age

- ▶ EFW 10th centile, FGR <3rd or with abnormal Dopplers
- ▶ Early/late onset



REFER

- ▶ Serial growth surveillance
- ▶ FMU referral if <28 weeks or severe
- ▶ Monitoring and timing of delivery

Fibroids

- ▶ Location, location, location!
- ▶ Most benign, with no issues
- ▶ Red degeneration

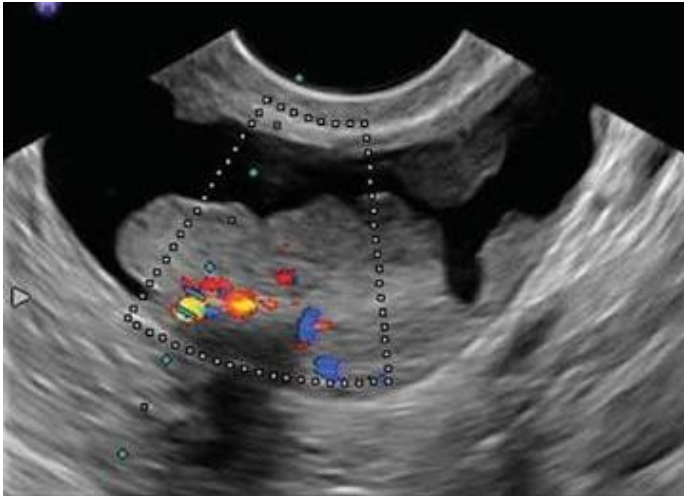


**REASSURE/
REVIEW**

- ▶ If not obstructing, reassure
- ▶ Mode of delivery
- ▶ Optimise haematinics – PPH risk

Ovarian Masses

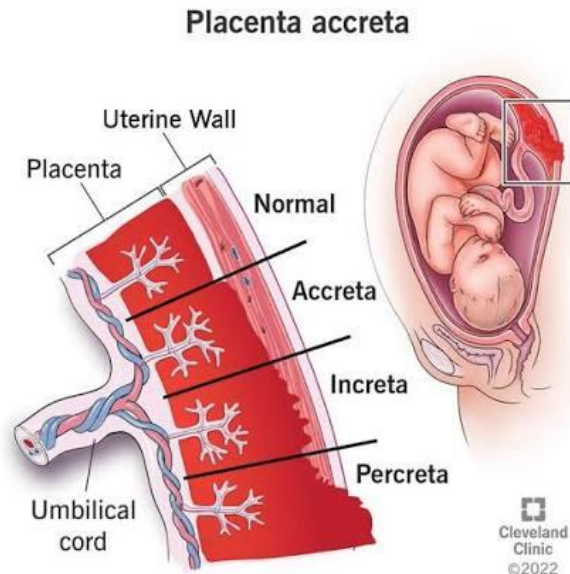
- ▶ Corpus luteum most commonly seen
- ▶ Most benign, with no issues
- ▶ Complex lesions require MDT care



- ▶ Complex may need to be removed in pregnancy
- ▶ Surveillance during routine scans
- ▶ Risk of torsion → ED

Placenta Accreta Spectrum

- ▶ Abnormal placental invasion
- ▶ Highest risk with multiple CS/placenta praevia



REFER

- ▶ Refer to center with PAS experience
- ▶ MDT care
- ▶ Monitoring and timing of delivery

Referral Pathways – Who?

**Northern
Health**



Call the local
switchboard

Obstetric Registrar
MFM Fellow
Obstetric Consultant
MFM Consultant



Referral Pathways – When?

Same day

- Symptomatic ectopic pregnancy
- Short cervix < 15 mm
- Torsion
- Haemodynamic instability
- Fetal arrhythmia
- Placenta praevia with bleeding

Within a week

- Raised NT
- Fetal abnormality
- Fetal growth restriction
- Placenta accreta spectrum
- Intrauterine pregnancy of uncertain prognosis

Routine

- Low lying placenta follow up
- Mild renal pelvis dilatation
- Growth review for SGA babies

Referral Pathways – What to include

Gestation and
dating

Current and
previous
ultrasounds

Prior pregnancy
history

Aneuploidy
screening results

Recessive
carrier
screening

Bloods –
especially
serology and
blood group



REASSURE
REVIEW
REFER

QUESTIONS?

@melbournemfm
(03) 9411 7474

Hospital contacts

Royal Women's Hospital

Switch P: 03 8345 2000

Shared care: shared.care@thewomens.org.au P: 03 8345 2129

GP Liaison E: gp.liaison@thewomens.org.au P: 03 8345 2064

GP Quick Access P: (03) 8345 2058

Northern Hospital

sharedmaternitycare@nh.org.au

Mercy Hospital for Women

primarycare@mercy.com.au

For urgent care: Emergency - 2nd on Reg - P: (03) 8458 4444 (option 0)

Western Hospital

General Practice Integration Unit (for shared care credentialing)

Ph: 8345 1735 Email: gp@wh.org.au.

Shared Maternity Care Co-ordinator (for current shared care patient care)

Maternitysharedcare@wh.org.au

Shared maternity care, workshop 2

22 October 7:00 PM to 9:00 PM

In this workshop, attendees will gain practical insights into folate supplementation, fish oil use and fetal rhesus testing, followed by an update on the GP's role in the fourth trimester, including maternal recovery, blood pressure management, pre-eclampsia, diabetes prevention, breastfeeding challenges and pelvic floor rehabilitation.

Learning outcomes:

- Outline the GP's role in supporting maternal physical recovery during the fourth trimester.
- Explain current evidence and importance of postpartum blood pressure surveillance and early identification of pre eclampsia complications.
- Describe how to apply an integrated postpartum care framework that supports maternal wellbeing, optimises chronic disease risk reduction, offers breastfeeding support and ensures safe follow up for women with complex pregnancies. (For example: hypertensive disorders, gestational diabetes, cholestasis.)
- Identify pregnant women who require high-dose folic acid supplementation and provide evidence-based advice on commonly used prenatal supplements, including fish oil and complementary therapies.
- Apply current recommendations for non-invasive prenatal testing (NIPT) for fetal RhD status in RhD-negative pregnancies and incorporate results into antenatal management.

Measuring outcomes for today

To obtain Measuring Outcomes hours for this session use the RACGP's Measuring Outcomes Tool.

Follow these five steps:

1. Log-in to myCPD
2. At very top of myCPD, click on 'Log'
3. From drop-down menu, click on 'Measuring Outcomes Tool'
4. Complete the form
5. Once you have completed the form, go to top of form and click 'Submit'



Thank you for attending. What's next?

After this session you will receive:

- 1 Slides, resources and the recording of this session within the week
- 2 RACGP CPD hours will be uploaded within 14 days.
- 3 Attendance certificate will be received within 4-6 weeks.

- **Register for more education sessions here:**
nwmpnhn.org.au/resources-events/events
- **Past education sessions can be found here:**
nwmpnhn.org.au/resources-events/resources
- **Session Survey Link**

<https://www.surveymonkey.com/r/3G7NW82>

Feedback - QR code

We welcome your feedback.
Let us know if you got what
you needed from this session.

